

## Perception of Farmers on Paddy promotion Programmes under Decentralized Planning- A Case of Adat Grama Panchayat of Thrissur District

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### ABSTRACT

*The major challenge faced by Kerala State is to achieve sustainable rice production for ensuring food security and attaining adequate income to the farmers. Decentralized planning is an approach to balanced development and reduction of regional disparities. The distinctiveness of Kerala's decentralization is that, it has formulated a participatory framework with inbuilt social accountability measures to take in citizen's involvement in local planning and governance in harmony with the national and regional policies. In this context, the present study was conducted in Adat grama panchayat in Puzhakkal block of Thrissur district, Kerala. It is one of the major rice cultivating panchayats in the district and has about 3,000 acres of kole paddy fields. The panchayat has successfully launched itself on the organic path to farming and set a model for panchayats elsewhere in the State. Thirty beneficiaries of various paddy promotion programmes were randomly selected. The study intended to analyse the perception of beneficiaries on effectiveness of paddy promotion programmes implemented under decentralized planning as well as the constraints experienced. For analyzing the perception and constraints perception index and Garrett ranking technique were employed respectively. The respondents had good perception on effectiveness of paddy promotion programmes implemented under decentralized planning. They had high perception on institutional support aspect. The constraint analysis pointed out that human resource constraint as the major difficulty while practicing the intervention. Appropriate intervention in this area can be made cent per cent successful by overcoming this lacunae. Based on the research findings some suggestions are put forth.*

**Key words:** Perception on effectiveness; Paddy promotion programmes; Decentralized planning; Constraints;

**A**gricultural development programmes are aimed at increasing food supply to feed the rapidly expanding population. The major challenge faced by the Government is to increase the agricultural production especially that of rice with limited natural resources in a sustainable manner for ensuring food security and providing income security to the farmers.

In spite of being the staple food of Kerala, the State has witnessed a steady decline in rice production since the 1980s. The sharp fall in the area under rice cultivation as well as in the quantity of rice produced in the State has important implications for Kerala's economic, ecological and social development. Apart from food

security, paddy fields are a vital part of Kerala's environment and ecological systems. They provide natural drainage paths for flood waters, conserve ground water, and are crucial for the preservation of a rich variety of flora and fauna (Thomas, 2011).

The local resources, climate and agro-ecological features contribute to the success or failure of any intervention. Hence, decentralized planning for development of agriculture and allied sector is important. Decentralized planning is an approach to balanced development and reduction of regional disparities. The distinctiveness of Kerala's decentralization is that, it has formulated a participatory framework with inbuilt social

accountability measures to take in citizen's involvement in local planning and governance in harmony with the national and regional policies.

With an objective to meet the growing demand for rice through increasing the rice production, the Government has been implementing various programmes. Integrated agricultural development programmes are being implemented continuously in different panchayats in Thrissur district for the past few decades mainly focusing on the development of different crops including paddy. Reports revealed that Thrissur district shows an increase in the area, production and productivity for the past few years, which clearly shows that there has been some positive effect of implemented paddy development programmes (DES, 2013; 2016).

Adat grama panchayat is one such major rice cultivating panchayat in Thrissur district that mainly practices *Kole* land paddy cultivation, unique wetlands lying in Thrissur District in Kerala, India. The panchayat had initiated and implemented several intensive and extensive measures to increase domestic rice production.

In this context, the present research study was taken up to analyse the perception of beneficiary farmers of Adat grama panchayat on the effectiveness and constraints of paddy promotion programmes under decentralized planning.

## METHODOLOGY

The study was conducted in Thrissur district during the year 2017. Ex-post facto research design was adopted for the study. Among the 14 districts of Kerala, Thrissur stands third in rice producing districts of Kerala according to DES (2016) report. Major portion of the paddy fields are *kole* lands. The study area was selected using multi stage sampling method. Accordingly Adat panchayat under Puzhakal block was selected. The panchayat has a total geographical area of 23.22 Sq. Km and rice cultivation is the major livelihood option of the farming community. The panchayat mainly follows *Mundakan* (Sept-Oct to Dec-Jan) crop and is also known for organic rice cultivation (GOK, 2017). The respondent category constituted thirty beneficiary paddy farmers randomly selected from various *padashekarams* of Adat panchayat.

Under decentralized planning, "Comprehensive Organic based Rice Development Project" was implemented with different components like distribution

of different inputs *viz*; seeds, production enhancing items, organic manure, bio-control agents like *Pseudomonas*, *Trichoderma*, sprayers, and assistance to farmers to meet the expense incurred as labour cost. Later "Paddy cultivation assistance to Scheduled Caste youth" scheme was initiated with an objective to encourage the SC youth.

In this study, the perception of the respondents on effectiveness of paddy promotion programmes under decentralized planning was analysed under five dimensions namely socio-economic dimension, agricultural input supply, institutional support, knowledge acquisition and empowerment. Each dimension represented by set of statements where every statement was evaluated by using a five-point continuum. The agreements were strongly agree, agree, undecided, disagree and strongly disagree and weights assigned for different agreement were 5, 4, 3, 2 and 1 respectively. Mean and standard deviation was used to categorize the respondents according to their perception indices. Perception index was calculated for each dimension using the equation:

$$PI = \frac{\text{Total score obtained on each statement}}{\text{Total possible score}} \times 100$$

PI= Perception index

In this study an attempt was made to record the profile and assess the constraints perceived by the paddy farmers. The constraints were categorized into eight categories, *viz*; human resource, financial, scheme feature, infrastructure support, market, time, input and knowledge constraints.

The respondents were asked to rank the constraints and it was analysed by using Garrett ranking technique. These were converted into units of scores by using the formula:

$$\text{per cent position} = \frac{R_{ij} - 0.5}{N_j} \times 100$$

Where,

R<sub>ij</sub> = rank given for i<sup>th</sup> factor by j<sup>th</sup> respondent

N<sub>j</sub> = number of factors ranked by j<sup>th</sup> respondent

The per cent position is converted into scores by referring the table given by *Garrett and Woodworth (1969)*.

Then for each factor the scores of the individual respondents were added together and divided by the total number of respondents for whom scores were added. These mean scores for all the factors were

arranged in descending order and the most influencing factors were identified through the ranks assigned.

**RESULTS AND DISCUSSION**

*Socio-economic profile of paddy farmers* : For better understanding of the scenario the profile of the farmers were recorded and the results are presented below.

**Table 1. Socio-economic profile of the beneficiary farmers**

Characteristic	Category	%
Age	Middle (36 to 55 years)	46.70
	Elderly (56 years and above )	53.30
Gender	Male	96.70
	Female	3.30
Education	Primary school	3.30
	High school	50.00
	Higher secondary	26.70
	Diploma	10.00
	Graduation or above	10.00
Family size	Small (Up to 2 members)	26.70
	Medium (3 to 4 members)	26.70
	Large (5 to 6 members)	46.70
Major Occupation	Farming	100.0
Subsidiary occupation	Private employee	40.00
	Labourer	3.30
	Self-employed	6.70
	Retired/ Pensioner	10.00
	Nil	40.00
Experience	Up to 15 years	6.70
	16 to 30 years	30.00
	31 to 45 years	40.00
	Above 45 years	23.30
Annual income	High (above 1 lakh rupees)	100.0
Farm size	Marginal (Below1 acre)	13.30
	Small (1.01 to 3 acres)	40.00
	Medium (3.01 to 5 acres)	26.70
	Large(Above 5 acres)	20.00
Area under paddy	Marginal (Below1 acre)	36.70
	Small (1.01 to 3 acres)	36.70
	Medium(3.01 to 5 acres)	23.30
	Large (Above 5 acres)	3.30
Pattern of rice cultivation	Owned	100.0

Table 1, reveals that cent per cent of the respondents were having farming as their major occupation, had an annual income above 1 lakh and cultivated paddy in their own lands. Dominance of male farmers (96.70%) was observed. Half of the respondents had high school education and more than half of the farmers belonged to elderly age group. The

results obtained indicate that the farmers from Adat panchayat were socio-economically well off.

**Table 2. Perception of beneficiary farmers on effectiveness of paddy promotion programmes**

Dimension-wise perception	PI	Category
Socio economic development	10.16	Low
Agricultural input supply	63.70	Low
Institutional support	84.22	High
Knowledge acquisition	78.89	Medium
Empowerment aspect	80.40	Medium
Mean: 62.27      SD: 73.90		

PI : Perception index,

*Perception of beneficiary farmers on effectiveness of paddy promotion programmes*: It is worth mentioning that, for all the dimensions, perception indices were more than 60. It itself shows a positive sign for the paddy promotion programmes. The scores are also categorized to different levels. The dimension-wise perception on effectiveness of paddy promotion programmes highlights that beneficiaries of Adat panchayat had a high perception on institutional support, medium level perception on empowerment and knowledge aspects and a lower mean perception towards agricultural input and socio economic aspects (Table 2).

*Institutional support* : The Adat farmers have been facilitated with strong institutional support (84.22), which eased the implementation as well as benefit availing processes to a great extent. The support provided by *Krishi Bhavan*, major public extension system was remarkable. The external institutions like Farmers Service Cooperative banks were highly relied upon by the farmers. This was one of the vital factors that had resulted in higher perception towards institutional support aspects.

*Empowerment perspective and Knowledge acquisition* : It also reveals that through the implementation of the programmes, the group farming activities got revitalized and mechanization of operations contributed high productivity of labour. As a result of these schemes, adoptions of scientific practices have been improved and interest towards resource management was enhanced. A study by *Nidhin (2015)* revealed that the farmers from Adat panchayat had been very enthusiastic, innovative and early adopters of the latest practices in farming. These strengthen the farmers’

perception towards knowledge (78.89) as well as empowerment aspects (80.40).

*Agricultural input supply* :It can be seen that the components availed under the scheme were less compared to other service providers which had contributed to the low perception on agriculture input supply. This may be due to the fact that the Adat farmers are well benefitted through Societies and Farmers Service Cooperative Banks which were actively involved in arranging various agricultural inputs (63.70).

*Socio-economic development*: The profile characteristics of Adat farmers reveal that they are affluent farmers with moderate education. The low perception of farmers on socio- economic aspects (62.27%) can be substantiated by considering their living status and already existed for favourable environment. It throws light to the fact that the beneficiary farmers might have perceived that the implementation of the schemes had comparatively less effect in their prevailing environment.

*Constraints perceived by the beneficiary farmers*: Constraints faced by the farmers were compared for their order of importance based on Garetts' mean score values obtained. The ranking obtained with respective to Garetts' mean score for various constraints are presented in Table 3.

**Table 3. Constraints perceived by the beneficiary farmers**

Constraint	MS	Rank
Human resource constraints	74.93	I
Financial constraints	68.33	II
Scheme feature constraints	67.07	III
Infrastructure support constraints	59.13	IV
Market Constraints	56.93	V
Time constraints	55.97	VI
Input constraints	51.37	VII
Knowledge constraints	39.60	VIII

The overall constraint analysis revealed that human resource constraint was found to be the most severe (mean score – 74.93) with the shortage of labours and officers for carrying out timely field operations and field level inspection. Financial constraint (68.33) ranked second most limiting factor, followed by scheme feature constraint (67.07). Inadequate financial assistance to meet the increasing cost of paddy production and delay in receiving payment were major financial constraints reported. Whereas, the farmers opined that the

procedure for availing schemes were complex, and they also pointed out that the present scheme components failed to address the crop loss occurring due to various climatic vagaries. They also listed absence of programmes promoting cultivation of local varieties, lack of training programmes on skill development and value addition activities. Another limitation figured out was the infrastructural constraints (59.13) like fragmented land holdings, lack of energy resources, logistic and storage facilities. Market constraint (56.93) was felt mainly due to lack of proper assistance in procurement and timely marketing of paddy, problems in marketing channels and delayed payment for marketed produce. Lack of timely availability of inputs in good quality and quantity and their proper monitoring as well as insufficient financial allocation resulted in the time (55.97) and input (51.37) constraints. As the beneficiaries were of good social and educational status, knowledge (39.60) constraint was the least felt one. Majority of the respondents were having good technical knowledge and were practicing scientific cultivation.

The research findings are in line with the observations made by *Anagha (2016)* in her study entitled 'Sustainable Paddy development scheme in Chathamangalam panchayat of Kozhikode District' and *Krishnan (2016)* on 'Comprehensive Paddy Development Scheme in Bharanikkav panchayat of Alappuzha District'.

*Suggestions for improving the effectiveness and minimizing the constraints* : Based on the research findings some suggestions are put forth as follows:

- Service of more field officers for regular monitoring of field activities may be ensured based on the geographical area of the panchayat.
- Promote formation of 'thozhilsena' (labour force) groups by *Kudumbashree* (*Kudumbashree* is the women empowerment and poverty eradication program, framed and enforced by the State Poverty Eradication Mission of the Government of Kerala) members and youth.
- Merge with Mahatma Gandhi National Rural Employment Guarantee Scheme for ensuring adequate labour supply.
- More schemes and scheme components with sufficient financial allocation including distribution of organic components and farm implements should be added.

- More emphasis to be given on conservation of local varieties, schemes on processing and value addition
- The procedure for availing scheme benefits should be simplified.
- Formulate projects for financial assistance for establishing infrastructural facilities at panchayat level.
- Provision for timely disbursement of procurement price and supply of inputs to the farmers may be ensured.
- Empowerment of office bearers of *padasekhara samithis* and master farmers through trainings and gradually encouraged to Rice Producers Company
- Include an emergency fund at panchayat level for meeting the unexpected loss due to natural calamity

and if not utilized, provision should be made to divert the fund for paddy promotional activities for the subsequent years.

## CONCLUSION

Results of the study revealed that the respondents had good perception on effectiveness of paddy promotion programmes implemented under decentralized planning. They had high perception on institutional support aspect, whereas medium perception on empowerment and knowledge acquisition aspects. The constraint analysis pointed out human resource constraint as the most severe constraint hindering the success of the interventions made. Any intervention in this area can be made cent per cent successful by overcoming this lacunae through the suggestions listed on behalf of the study.

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